"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

24010

18 3100

AUTHORS: [illegible], A.I., Perl'yn, G.V., P[illegible] V.A., and S[illegible], V.A.

TITLE: S[illegible] temperature perturbations during the resolution of the [illegible] problem by sodium

PERIODICAL: Z[illegible] prikladnoy mekhaniki, v. 34, no. 6, 1[illegible]

TEXT: A large [illegible] was used to study the [illegible] tioned in the title. Heat to the [illegible] was with a variable, easily and rapidly [illegible] sodium was varied periodically when the steady-state quantity [illegible] had been [illegible]. There was no [illegible] and the [illegible] from a fan. The inner wall temperature was measured by a thermocouple [illegible] thermocouple, housed in a protective stainless steel case. The surface temperature was measured by a single-pointed thermocouple passing through the roof. The outer wall

Card 1/[illegible]

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24010

Some temperature pe ...ar...ies ..

temperature by sealed thermocouples close to the wall. In the early stages of the reaction the temperature rises first at the top of the reactor. Addition of titanium tetrachloride causes a rapid rise in the temperature in the upper part of the reactor so that in 15-20 minutes, fusion is started in most cases to avoid melting of the thermocouple sheaths and a small amount of the reducing agent has been used up the maximum temperature moves to the central region. As more metal is used the fusion temperature rises sharply and the temperature above the fusion bath falls. The cycle is repeated by adding more reducing agent. The characteristic time-temperature curves for this reaction are given graphically. These temperature changes are related to the utilization coefficient of the reducing agent and depend on two things: the high sodium vapor tension at the given temperature and the ability of sodium to dissolve in the considerable amounts of sodium chloride formed. A sodium surplus leads to vaporization of the reducing agent, as a result of which the reaction continues in the gaseous phase. Therefore, the temperature above the fusion rises. The more

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Some temperature peculiarities ...

sodium chloride is formed, the more sodium is dissolved. When no sodium remains vaporization ceases and reduction only continues through the interaction of titanium tetrachloride and the fusion containing the dissolved sodium. The utilization coefficient can be calculated as follows: The maximum coefficient is assumed to be x. Then the amount of sodium remaining is $\frac{P}{100}x$; the amount of sodium chloride formed according to the reaction $4Na + TiCl_4 = 4NaCl + Ti$ will be $1.65x$. If the solubility of sodium in sodium chloride is P%, then

$$\frac{P}{100}x = \frac{1}{0.0265P}, \text{ where } x = \frac{1}{0.0265P}. \quad (1)$$

The high temperature may lead to overheating and melting of parts of the apparatus. This can be avoided by slowing the addition of titanium tetrachloride. The bases of the inner and outer thermocouples are worst placed. The external thermocouple shows the wall temperature more accurately, the inner gives a comparatively higher reading and thereby hinder any intensification of the process. The

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Some temperature peculiarities ...

discrepancy is small [illegible] on the fusion level at low speeds, but increases with rise in speed (to 100-150°). Above the fusion level the discrepancy may reach [illegible], though the wall temperature does not exceed 600°. Experiments using 10 thermocouples confirmed this. Therefore, when controlling the temperature by three or four vertically placed thermocouples there must be a reserve of 100-150° in the temperature band in the fusing region. The wall temperature must not exceed 800-820° with air cooling. The wall temperature at the fusion level must be watched and, with periodic filling, the gas phase temperature. If the utilization coefficient is kept above [illegible] by continuous feeding of sodium simultaneously with titanium tetrachloride the need for screen temperature control will decline because the unused sodium will dissolve in the salt and there will be a minimum of reaction in the gaseous phase. The reduction process can thus be intensified. There are 4 figures, 1 table and 1 non-Soviet-bloc reference. The reference to the English-language publication reads as follows: M.A. Breding, I.W. Johnson, J.A. Chem. Soc., 77, 307, 1955.

Card 4/5

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24010
S/080/61/034/006/014/021
D247/D305

Some temperature peculiarities ...

ASSOCIATION: Vsesoyuznyy alyuminiyevo-magniyevyy institut (All-Union Institute of Magnesium and Aluminum)

SUBMITTED: July 2, 1960

Card 5/5

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'EV, P. P.

PT-1478 (Some data on the comparative anatomy of malarial mosquitoes)
SO: Parazitologicheskii Sbornik Zoologicheskogo Muzeia, 1: 75-96, 1930.
(Orginal Russian source unavailable for review. Translation does not include illustrations)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, P. P.

S

A Contribution of the Effect Produced on Animals by the Venom of Vipera Raddei BITG and of Vipera Renardi Ursini Christ. Farm. i Toks., v. 4, No 2, 1941, p. 53.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, P.P.

Academician Evgenii Nikanorovich Pavlovskii; his 70th birthday.
Ent.oboz. 34:3-8 '55. (MLRA 9:5)
(Pavlovskii, Evgenii Nikanorovich, 1884-)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

DOLMATOVA, A.V.,; PERFIL'YEV, P.P.,; LIL'P. G.O.

Moth flies (Phlebotomus) in the forests of the U.S.S.R. Med. paraz. 25 no.1:38-40 Ja-M '56 (MLRA 9:6)

1. Iz Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (dir.-instituta prof. P.G. Sergiyev) i kafedry obshchey biologii i parazitologii voyenno-morskoy meditsinskoy akademii (nach. kafedry-prof. P.P. Perfil'yev)

(FLIES
Phlebotomus species in forests of Russia)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, P.P.; BARKAGAN, Z.S.

History of the study of poisonous animals. Trudy Inst.ist.est.i tekh. 16:123-145 '57. (MIRA 10:10)

(Poisonous animals)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, P.P., doktor biologicheskikh nauk

From the history of the studies on mosquitoes. Report No.2.
Trudy Inst. ist. est. i tekh. 41:168-182 '61. (MIRA 15:2)
(Mosquitoes)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

CHEMAKAL, V.L., otv.red.; ANDREYEV, A.I., red. [deceased]; PEREIL'YEV, P.P., red.; FIGUROVSKIY, N.A., red.; PERMINOV, S.V., red.izd-va; SUVOROV, I.V., red.izd-va; PEVZNER, R.S., tekhn.red.; SMIRNOVA, A.V., tekhn.red.

[Lomonosov; articles and other material] Lomonosov; sbornik statei i materialov. Moskva. Vol.4. 1960. 464 p. (MIRA 13:4)

1. Akademiya nauk SSSR. Institut istorii yestestvoznaniya i tekhniki.
(Lomonosov, Mikhail Vasil'evich, 1711-1765)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, P.P. (Leningrad)

B.E. Raikov, a historian of natural sciences; on his 80th birthday. Vop.ist.est. i tekh. no.11:137-138 '61. (MIRA 14:11)
(Raikov, Boris Evgen'evich, 1881-)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, P. P., POGODINA, E. A., FEDOROV, M. N., SPRERANSKAYA, V. N., SIYANITSKIY, F. M., SHUSTROV, A. K., ALEKSANDROV, P. M., KLEVANKIN, V. N., BORISKIN, M. M., LIL'P, G. M., ZIL'BERMINTS, I. V., GUDNEVA, O. A., POPOV, S. C., DENISENKO, V. K., KOROVIN, F. T. and GUTSEVICH, A. V.

"The Effectiveness of a Chemical Method for Combatting Arthropods Over Large Areas from Airplanes."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

(Leningrad - Moscow)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, P.P.

Phlebotomus minutus R. and species of the minutus group (subgenus Sergentomiya) in Crimea and Caucasus. Communication 2. Med.paras.i paras.bol 29 no.1:40-48 Ja-F '60.

(MIRA 13:10)

(MOTH FLIES)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, P.P., doktor biologicheskikh nauk

History of the study of Phlebotomus. Trudy Inst.ist.est.i tekh. 31:268-278 '60. (MIRA 13:8)
(Moth flies)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

ALFEYEV, N.I.; BREGETOVA, N.G.; GNEZDILOV, V.G. [deceased]; GUTSEVICH, A.V.; KOSTYLEV, N.N.; NIKOLAYEV, B.P.; OLSUF'YEV, N.G.; PAVLOVSKIY, Yevgeniy Nikanorovich, akademik; PERVOMAYSKIY, G.S.; PERFIL'YEV, P.P.; POMERANTSEV, B.I.[deceased]; SALYAYEV, V.A.; SKVORTSOV, B.P.; SMIRNOV, G.G.; TERAVSKIY, I.K.; BLAGOVESHCHENSKIY, D.I., doktor, red.; RULEVA, M.S., tekhn.red.

[Laboratory manual on medical parasitology] Laboratornyi praktikum meditsinskoi parazitologii. Pod red. E.N.Pavlovskogo. Leningrad, Gos.izd-vo med.lit-ry, Leningr.otd-nie, 1959. 486 p. (MIRA 12:9)

(MEDICAL PARASITOLOGY)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, P.P.

Phlebotomus minutus R. and species of the group minutus (Sergentomyia) in the Crimea and the Caucasus. Med.paraz. i paraz.bol. 28 no.3:328-335 My-Je '59. (MIRA 12:9)

(FLIES,
Phlebotomus minutus in Crimea & Caucasus (Rus))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.

Inventories are conduc[illegible] but violations continue. Fin. SSSR 37 no.10: 79-80 O '63. (MIRA 17:2)

1. Starshiy ekonomist otdela gosudarstvennykh dokhodov Irkutskogo oblastnogo finansovogo otdela.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V., podpolkovnik, komandir tankovogo polka

Skillful maneuver and accurate fire. Komm. Vooruzh. Sil. 46 no.[illegible]
44-48 Jl '65. (MIRA 18:[illegible])

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.I.

New data on the ecology of the Asiatic white crane. Biul. MOIP. Otd. biol. 68 no.1:25-28 Ja-F '63. (MIRA 17:4)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PEGTILYEV, V'SILIY IVA[illegible]VICH

[illegible]

79 p. (OTHER IN U.)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

YEGOROV, O.V.; PERFIL'YEV, V.I.

Some characteristics of feeding owl in the Peleduy basin (southwestern Yakutia). Nauch.soob. IAFAN SSSR no.2:57-61 '59. (MIRA 16:3)
(Peleduy Valley--Owls--Feeds)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PREFIL'YEV, V.I.

Imported steam boilers. Sakh.prom. 30 no.7:26-29 Jl '56.
(MLRA 9:11)

1. Sakharnyy zavod imeni Lenina.
(Boilers)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

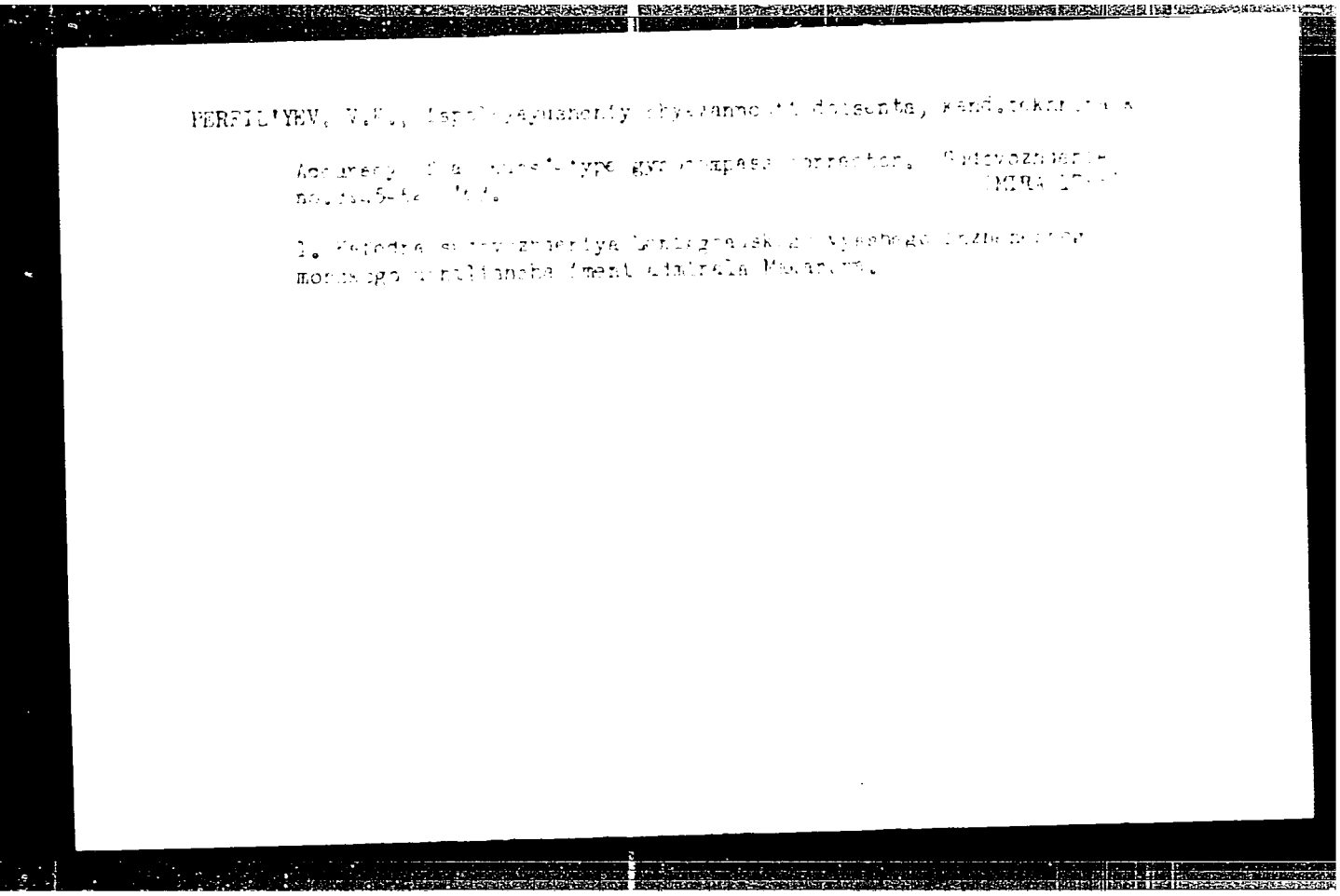
"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, Vasiliy Ivanovich; TIMOKHINA, V.I., redaktor; NATAPOV, M.I., tekhnicheskiy redaktor.

[Instruments and devices for open forging with sample methods of manufacturing the standard parts] Instrumenty i prisposobleniia dlia svobodnoi kovki s primernoi tekhnologiei izgotovleniia tipovykh detalei. Moskva, Vses.kooperativnoe izd-vo 1955. 79 p. (MLRA 9:1)
(Forging machinery)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8



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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.K., assistent, kand.tekhn.nauk

Using "Kurs"-type gyrocompass correctors at high latitudes. Sudovozhdenie no.2:97-100 '62. (MIRA 17:4)

1. Kafedra sudovozhdeniya Leningradskogo vysshego inzhenernogo morskogo uchilishcha im. admirala Makarova.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.K.

SOV/4895

PHASE I BOOK EXPLOITATION

Blinov, I. A., S. V. Denisov, and V. K. Perfil'yev

Ekspluatatsiya elektronavigatsionnykh priborov na morskikh sudakh (Operation of Electric Aids to Navigation Aboard Marine Vessels) Leningrad, Izd-vo "Morskoy transport", 1960. 221 p. Errata slip inserted. 10,000 copies printed.

Specialist Ed.: I. A. Blinov; Reviewer: A. F. Matsyuto; Ed. of Publishing House: N. V. Sandler; Tech. Ed.: L. P. Drozhzhina.

PURPOSE: This book has been recommended as a textbook by the Department of Schools of the Ministry of the Merchant Marine for refresher courses for fleet command personnel. It may also be used by specialists operating electric navigational aids aboard ships and by students in schools of higher and secondary education.

COVERAGE: The book describes the principle of operation of several shipboard electric navigational apparatuses and the experience

Card ~~1/10~~

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

BLINOV, Igor' Aleksandrovich; DENISOV, Semen Vasil'yevich; PERFIL'YEV, Vladimir Konstantinovich; FRIDMAN, Z.S., red.

[Use of electronavigational devices on merchant ships] Ekspluatatsiia elektronavigatsionnykh priborov na morskikh sudakh. Izd.2., ispr. i dop. Moskva, Transport, 1964. 255 p. (MIRA 17:11)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.K., [illegible]

[illegible]

1. Kafedra [illegible] sredstv sudovozhdeniya Leningradskogo vysshego [illegible] inzhenernogo morskogo uchilishcha imeni admirala Makarova.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

L 38149-65 EEO-2/EWT(d)/EEC(k)-2/EEC(t)/EED-2/EWA(c) Pn-4/Po-4/Pq-4/Pe-4/
Pae-2/Pk-4/Pl-4 BC UR/
AM5006606 BOOK EXPLOITATION

Blinov, Igor' Aleksandrovich; Denisov, Semen Vasil'yevich; Perfil'yev, Vladimir Konstantinovich

Operation of electronic navigation instruments on ships (Ekspluatatsiya elektronavigatsionnykh priborov na morskikh sudakh) 2nd. ed., rev. and enl. Moscow-Leningrad, Izd-vo "Transport", 196.. 255 p. illus., diagrs. (in pocket). 9000 copies printed. Editor: Z. S. Frishman; Technical editor: O. I. Kotlyakova; Proofreader: Ye. P. Khudyakova.

Series note: Kursy usovershenstvovaniya plavsostava MMF

TOPIC TAGS: automatic guidance, depth finding, gyrocompass, ship navigation

PURPOSE AND COVERAGE: This book was intended as a manual for courses to raise the qualifications of commanding officers in the navy; it may be of use also to specialists attending electronic navigation instruments on ships and to students of higher and secondary marine schools. The principles and experience in the application of different types of gyrocompasses, hydraulic ships' logs, depth sound

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devices, and the automatic rudder are presented. The authors assume the reader to possess sufficient understanding of the design of electronic navigation instruments and the fields of electrical and radio engineering. The plant descriptions of instruments, some developments by TSNIIMF and LVIMU, and experience in the actual use of these instruments on ships were all utilized in preparing the book. The book has been authorized by the Otdel Uchebnykh Zavedeniy MMF as a text for courses to improve the qualifications of naval commanding officers.

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Ch. I. Information from electrical engineering - - 5
Ch. II. Installation and repair - - 39
Sec. II. Gyrocompasses and automatic rudders
Ch. III. Gyrocompass "Kurs-3" - - 50
Ch. IV. Gyrocompass "Kurs-4" - - 98
Ch. V. Gyrocompass "Amur" - - 124

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

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AM5006606

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Ch. VII. Automatic rudder ABR-1 - - 160
Sec. III. Ship logs
Ch. VIII. Hydrodynamic log LG-25 - - 184
Ch. IX. Hydrodynamic log MGL-25 - - 206
Sec. IV. Depth sounding devices
Ch. X. Depth sounding device NEL-5 - - 221
Ch. XI. Depth sounding device NEL-4 - - 240
Ch. XII. Safety technique, documentation, spare parts, and instruments - - 248
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Card 3/3

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

ANTONOVA, A.V.; PERFIL'YEV, V.M.

Moisture resistant wallpaper with film coating. Bum. prom. no.2: 21-23 F '64. (MIRA 17:3)

1. Moskovskaya oboynaya fabrika.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.M.; FEY KAY-PIN [Fei K'ai-p'ing].

Installation of digesters and blowoff tanks. Bum.prom.31 no.12: 15-20 D '56. (MLRA 10:2)

1. TSellyulozno-bumazhnyy kombinat v gorode TSzyamusy Kitayskoy Narodnoy Respubliki.
(China--Woodpulp industry)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFILYEV, V. P.

S/089/60/008/01/021/021
B006/B063 82302

AUTHORS: Barkhatov, N. M., Kosheyarovskiy, S. F., Polikarpov, V. A., Kazachkovskiy, O. D., Perfilyev, V. P., Shishkin, V. P., Shishkin, A. P., Shishkin, G. P., Shishkin, A. P., Shishkin, G. P., Shishkin, A. P., Shishkin, G

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The CPM(EM) Research Reactor With a Capacity of 50 Mw

core, pressed from uranium oxide powder and electrolytic nickel; the core is contained in a nickel can. Fig. 6 shows a section through the assembly, Fig. 7 another through a fuel element. Data of one such element are compiled already the inner reactor cavity into two zones. body shield (Fig. 2) divide the shield are briefly discussed, and the cooling water the functions of this shield are briefly discussed, and the cooling water circulation is described next. The control system is described in greater detail. This system consists of two automatic regulators with two regulation rods each, four main safety rods which can also be used as coin rods, and four safety rods which can ionization chambers located outside the reactor body; it covers the power range from 0.5 to 100%. Several details concerning safety and this rods are thoroughly discussed. Reactor shield: Fig. 6 shows a cross section through reactor plus shield. The latter consists of steel and heavy concrete. A few details are described, and the process of heat extraction is briefly dealt with. The cooling system is finally discussed. It consists of four closed, separate loops. The water is kept flowing by circulating pumps (500 t/h, 10 atü); the heat exchange power is 15 Mw.

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There are 8 figures and

SUBMITTED: March 15, 1960

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

VASENIN, Aleksandr Yermolayevich ; PERFIL'YEV, V.P., redaktor; STRUKOV, A.N., redaktor; KHELEMSKAYA, L.M., tekhnicheskiy redaktor

[The mechanization of loading and unloading work in the postal service] Mekhanizatsiia pogruzochno-razgruzochnykh rabot v pochtovykh predpriiatiiakh. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1955. 45 p. (MLRA 9:2)
(Loading and unloading) (Postal service)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.P.

Mechanization of postal communication enterprises. Vest. sviazi 15 no.7:18-20 Jl '55. (MLRA 8:8)

1. Glavnyy inzhener Glavnogo pochtovogo upravleniya Ministerstva svyazi SSSR. (Postal service)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PLESHKO, A.P., PERELIYUV, V.V.

Effect of auxiliary connecting channels on the operation of strain gauges. Izm. tekh. no.3:41-44 My-Je '57. (MLRA 10:8)
(Strain gauges)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

SOV-115-58-3-22/41

AUTHORS: Pleshko, A.P. and Perfil'yev, V.V.

TITLE: Tuning-fork Vibrostand (Kamertonnyy vibrostend)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 3, pp 57 - 59 (USSR)

ABSTRACT: The existing vibrostands develop vibration acceleration of no more than several dozen g, whereas in tests of powerful motors or accelerometer transmitters and indicators the high-frequency vibroaccelerations often reach many hundreds g. The described new special tuning-fork vibrostand, consisting of 9 tuning forks, permits dynamic calibration of accelerometer transmitters and indicators as well as durability tests on not too heavy machine parts and components for work in conditions up to 500 g at fixed pre-selected frequencies. Detailed description of design is given and

Card 1/2

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Tuning-fork Vibrostand SOV-115-58-3-22/41

illustrated by diagram (Fig. 1) and photograph (Fig. 3). The tuning forks are made of steel "S20", with a cross section of 250x80 $mm^2$, and have a work life of over 10 hours. There is 1 photo, 1 schematic diagram, 2 graphs and 3 Soviet references.

1. Accelerometers--Calibration 2. Laboratory--Test methods

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PLESHKO, A.P.; PERFIL'YEV, V.V.

Stand with diaphragm vibrators. Izm.tekh.no.2:12-14 F '61.
(MIRA 14:2)

(Vibrators)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PLESHKO, A.P.; PERFIL'YEV, V.V.

Unit for dynamic testing of pressure pickups. Izm.tekh. no.7:17-19 Jl '61. (MIRA 14:6)
(Strain gauges)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

L 34976-65 EWT(1) IJP(c)
ACCESSION NR: AP5008585 S/0286/65/000/006/0131/0132

AUTHORS: Dubinskiy, S. A.; Gerasimov, A. P.; Perfil'yev, V. V.; Shvetsov, G. F.

TITLE: Luminescence apparatus for determining and extracting luminescent materials. Class 42, No. 149254

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 131-132

TOPIC TAGS: luminescence, luminescence analysis, diamond, safety device, radioactivity, radioactive isotope

ABSTRACT: This Author Certificate presents a luminescence apparatus for determining and extracting luminescent materials such as diamonds. The apparatus consists of a case with a peephole, a bin with a loader, a carrier, and a holder for the rock specimen. To protect the personnel from radiation and to inspect not only the luminescent materials but also other materials by their radiation transmission, the apparatus is supplied with a lead container with a sectioned shutter for a radioactive isotope. The container is placed below the carrier belt, while a mirror and a fluorescent screen are located above the belt.

ASSOCIATION: none
Card 1/1

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V. Ye.

"The Influence of Dwarf Seedling Stocks of the Apple Tree on a Graft in Relation to the Planting of Fruit Buds."

dissertation for the degree of Candidate of Biological Sciences (awarded by the Timiryazev Agricultural Academy, 1962)

(Izvestiya Timiryazevskoy Sel'skokhozyaystvennoy Akademii, Moscow, No. 2, 1963, pp 232-236)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.Ye.

Relation between the calcium content of the ash of apple shoots and the capacity of trees to set fruit buds. Fiziol. rast. 9 no.3:371-372 '62. (MIRA 15:11)

1. Department of Fruit Growing I.V.Michurin Fruit-Vegetable Institute, Michurinsk.
(Plants, Effect of calcium on) (Buds) (Apple)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.Ye.

Causes of early fruit bearing in dwarf apple trees. Agrobiologiia no.4:619-622 Jl-Ag '62. (MIRA 15:9)

1. Plodoovoshchnoy institut imeni I.V.Michurina, Michurinsk.
(DWARF FRUIT TREES)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.Ye.

Precocity of dwarf apple trees. Nauch. dokl. vys. shkoly; biol. nauki, no. 1:195-197 '61. (MIRA 14:2)

1. Rekomendovana kafedroy plodovodstva Michurinskogo plodoovoshchnogo instituta im. I.V. Michurina.
(APPLE) (DWARF FRUIT TREES)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V. Ye.

Effect of rootstock on the proportion between bark and wood in apple trees. Agrobiologiia no.2:304-305 Mr-Ap '61. (MIRA 14:3)

1. Plodoovoshchnoy institut imeni I.V. Michurina, kafedra plodovodstva.

(Apple)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, Yu.S.; LEVITSKIY, Ye.S.

Bugryshikha series and its trilobites (Ordovician of the Gornyy Altai). Biul.MOIP.Otd.geol.38no.2:17-29 Mr-Ap '63. (MIRA 16:5)

(Altai Mountains--Trilobites)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, Yu.S.

Pre-Cambrian stratigraphy of the Gornyy Altai. Izv. vys. ucheb. zav.; geol. i razv. no.11:19-32 N '60. (MIRA 14:2)

1. Vsesoyuznyy aerogeologicheskiy trest.
(Altai Mountains--Geology, Stratigraphic)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, Yu.S.

New data on the lower Paleozoic stratigraphy of the Gornyy Altai. Izv.vys.ucheb.zav.; geol.i razv. 2 no.11:20-30 N '59. (MIRA 13:6)

1. Moskovskiy geologorazvedochnyy institut im. S.Ordzhonikidze.
(Altai Mountains--Geology, Stratigraphic)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

BOGOMOLOVA, M.I.; PERFIL'YEVA, A.A.

Using the method of flame photometry to determine the NaCl content of petroleum. Izv. vys. ucheb. zav.; neft' i gaz 5 no.1:79-81 '62. (MIRA 16:11)

1. Kazanskiy aviatsionnyy institut.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

ABUZYAROVA, R.Ya.; PERFIL'YEVA, A.R.

Eocene spore-pollen complex of the western coast of the Aral Sea.
Bot.zhur. 47 no.2:242-244 F '62. (MIRA 15:3)

1. Kazakhskiy gosudarstvennyy universitet imeni Kirova, Alma-Ata.
(Aral Sea region—Paleobotany, Stratigraphic)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

GILYAZUTDINOVA, Z.Sh.; PERFIL'YEVA, G.V.

Therapeutic gymnastics in gynecological practice. Vop. kur., fizioter. i lech. fiz. kul't. 28 no.5:447-454 S-O '63. (MIRA 17:9)

1. Iz kafedry akusherstva i ginekologii (zav.- prof. I.V. Danilov) i kafedry fizioterapii i lechebnoy fizicheskoy kul'tury Kazanskogo instituta usovershenstvovaniya vrachey.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

GILYA'UTDINOVA, [illegible], FEDOTOVA, G.V.

Exercise therapy in the puerperium. Vop. kur., fizioter. i lech. fiz. kul't., 29 no.4:358-363 Jl-Ag '64.

(MIRA [illegible])

1. Iz kafedry akusherstva i ginekologii (zav.- prof. I.V. Danilov) i kafedry fizioterapii i lechebnoy fizicheskoy kul'tury Kazanskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

GILYAZUTDINOVA, Z.Sh., dotsent; PERFIL'YEVA, G.V., ordinator

Exercise therapy in gynecological and obstetrical practice. Kaz. med. zhur. no.6:51-52 N-D '60. (MIRA 13:12)

1. Kafedra akusherstva i ginekologii (zav. - prof. I.V. Danilov) i kafedra fizioterapii i lechebnoy fizkul'tury (zav. - V.Ye.Dobruskin) Kazanskogo gosudarstvennogo institut dlya usovershenstvovaniya vrachey imeni V.I.Lenina.

(EXERCISE THERAPY) (WOMEN--DISEASES)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

ARBUZOV, B.A., VINOKUROV, G.M., PERFILYEVA, I.A.

The synthesis of certain bifunctional compounds containing phosphorus.

Khimiya i Primeneniye Fosfororganicheskikh Soyedineniy (Chemistry and application of organophosphorus compounds) A. YE. ARBUZOV, Ed. Publ. by Kazan Affil. Acad. Sci. USSR, Moscow 1962, 632 pp.

Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

5 (2, 3)

AUTHORS: Arbuzov, B. A., Academician, Vinokurova, G. M., Perfil'yeva, I. A.

SOV/20-127-6-20/51

TITLE: Addition of Phenylphosphine to Unsaturated Compounds

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 6, pp 1217-1220 (USSR)

ABSTRACT: After a survey of publications (Refs 1-4), the authors indicate brief results of their investigations made in recent years on the addition mentioned in the title: they intended to obtain bifunctional, phosphorus-containing compunds. It has become evident that phenylphosphine, in the presence of a catalyst and on heating, can be easily added to the acrylic- and methacrylic-acid esters. Besides the addition products, small quantities of oxides of the corresponding phosphines are produced by oxidation of the tertiary phosphines forming. The addition of phenylphosphine to allyl alcohol proceeds under the influence of catalysts which produce free radicals (of the dinitryl-azo-bis-isobutyric acid, see Equation). Table 1 shows the compounds obtained and their constants. For obtaining various derivatives, the authors repeated the experiments by Mann (Ref 3). Here, β-cyano-ethyl-phenylphosphine, di-(β-cyano-ethyl)-phenylphosphine, and the oxide

Card 1/2

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of the latter, were isolated. By a reduction of the di-(β-cyano-ethyl)-phenylphosphine by means of lithium aluminum hydride, di-(β-amino-propyl)-phenylphosphine was produced. The tertiary phosphines obtained are easily oxidized by the atmospheric oxygen (as derivatives of trivalent phosphorus) into the corresponding phosphine oxides, and can also add sulphur. Table 2 shows constants of the 3 last-mentioned compounds obtained. Finally, the authors carried out the interaction reactions of phenyl-phosphine with acrolein, methacrylic acid, ethylene oxide, and allyl bromide. There are 2 tables and 5 references.

ASSOCIATION: Institut organicheskoy khimii Kazanskogo filiala Akademii nauk SSSR (Institute of Organic Chemistry of the Kazan' Branch of the Academy of Sciences, USSR)

SUBMITTED: June 5, 1959



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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

[illegible], I. P. --

"The Arterial Vessels of the Uterus and Its [illegible] Normal and Certain Pathological Conditions." Qualified DSc, Central Inst for the [illegible] Training of Physicians, [illegible] (U, 22 Oct 54.)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (U)

Sov Sci No. 3, [illegible]

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.I.

Defects of the BTSR-1 chain grate. Sakh.prom. 29 no.2:16-17 '55.
(MLRA 8:6)

1. Sakharnyy zavod imeni Lenina.
(Stokers, Mechanical)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

GORNUNG, M.B.; PERFIL'YEVA, N.A., red.; KOSTINSKIY, D.N., red.; GRETSOVA, V.A., tekhn. red.

[Guinea; 1:1,250,000]Gvineia; 1:1,250,000. Moskva, Gos. izd-vo geogr. lit-ry, 1962. ___ Gornung, M.B.[Text] 16 p. (MIRA 15:11)

(Guinea—Maps)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

SHUROV, S.I., obshchiy red.; BLINOVA, N.I., otv.red.; IVANOV, Yu.M., red. kart; IGNATENKO, A.M., red.kart; KOLESNIKOVA, A.G., red.kart; LEBEDEVA, S.K., red.kart; PEHTSON, Ye.E., red.kart; PERFIL'YEVA, N.A., red.kart; SERGEYEVA, S.I., red.kart; SMIRNOVA, A.L., red. kart; KHOLODOK, V.D., red.kart; SHURAN, Ye.M., red.kart; KUZNETSOVA, O.L., tekhn.red.; LIFSHITS, N.I., tekhn.red.; SKALICHEV, A.T., tekhn.red.

[World atlas] Atlas mira. Moskva, Glav.upr.geodez. i kartografii MVD SSSR, 1959. 324 p. (MIRA 12:12)
(Atlases)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEVA, N. L.

Photography - Films.

Variation in the amounts of stabilizers in cellulose triacetate films during decomposition of oxidation at high temperatures. Zhur. prikl. khim. 25 No. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEVA, O.G.; RESHETNIKOV, N.A.

System LiOH - $Li_2CO_3$. Zhur. neorg. khim. 9 no.11:2602-2605 N '64 (MIRA 18:1)

1. Irkutskiy meditsinskiy institut.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

TRUSOVA, V.N., inzh.; PERFIL'YEVA, S.A., inzh.

New designs of supporting rod insulators for outdoor use.
Elektrotekhnika 34 no.10:77-78 O '63. (MIRA 16:11)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

OLSUF'YEV, N.G.; TSVETKOVA, Ye.M.; BORODIN, V.P.; KOROLEVA, A.P.; SIL'CHENKO, V.S.; KHOROSHEV, I.G.; MYASNIKOV, Yu.A.; PERFIL'YEVA, Z.A.; KRATOKHVIL' N.I.; VAYSTIKH, M.A.; RAVDONIKAS, O.V.; BARANOVA, N.K.; ZIMINA, V.Ye.; TORMASOVA, L.N.; USTIN-PETROVA, T.F.; AKHF'YEV, S.S.; KONKINA, N.S.; KUL'BA, A.P.; MAL'TSEVA, N.K.; SHELANOVA, G.M.; SORINA, A.M.; BRANITSKAYA, V.S.; PRUDNIKOVA, M.N.

Tularin from a vaccinal strain for epicutaneous use. Zhur. mikrobiol.epid. i immun. 27 no.9:22-28 S '56. (MLRA 9:10)

1. Iz Instituta epidemiologii i mikrobiologii im. N.F.Gamelei AMN SSSR i protivotuliaremicheskikh stantsiy Stalingradskoy, Voronezhskoy, Tul'skoy, Plavskoy, Omskoy, Krasnodarskoy, Moskovskoy i Smolenskoy.
(TULAREMIA, diagnosis,
tularin epicutaneous test (Rus))

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, V.P.

Mechanical equipment in post offices abroad. Vest.sviazi 16 no.10:32-34 O '56. (MIRA 10:10)

1. Glavnyy inzhener Glavnogo pochtovogo upravleniya Ministerstva svyazi SSSR.
(Europe, Western--Postal service--Equipment and supplies)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERFIL'YEV, Yu.S.

BARTSEVA, N.N.; PERFIL'YEV, Yu.S.

Materials on the stratigraphy of the Ordovician and Silurian of the northwestern Altai Mountains. Trudy VAGT no.3:5-12 '57. (MIRA 11:3)
(Altai Mountains--Geology, Stratigraphic)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

M

USSR/Cultivated Plants - Grains

Abs Jour : Ref Zhur Biol., No 12, 1958, 53537

Author : Perfil'yeva, R.Ya.

Inst : Yaroslav Agricultural Institute

Title : On the Problem of the Physiology of Pre-Harvest Side-Dressing of Grain Crops

Orig Pub : Tr. Yaroslavsk. s.-kh. in.-ta, 1956, 3, 101-104

Abstract : The pre-harvest side-dressing (1953-1955 experiments) of spring wheat with a 10% solution of $N_{aa}$ in the dose of 6 kg increased the yield by 1-2 centners/ha. The high synthetizing action of the invertase was preserved, to the moment of harvesting, in the leaves of those plants dressed with extra nitrogen. It is supposed that such supplementary feeding lengthens the period of normal activity of the ferments and contributes to a more complete

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

MESHCHANINOV, A.I., prof.; PERFIL'YEVA, Ye.A., kand.biol.nauk

Evaluation of the methylene blue discoloration reaction in malignant tumors. Vrach.delo no.6:653-654 Je '59. (MIRA 12:12)

1. Poliklinika Khar'kovskogo nauchnogo meditsinskogo obshchestva.
(METHYLENE BLUE) (CANCER)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

BELIKOVA-ALDAKOVA, V.D.; BLYUMEL', N.F.; ZHARIKOVA, A.D.; PERFIL'YEVA, Ye.B.; SOLOV'YEVA, N.A.

Causes reducing vaccinal immunity to diphtheria. Zhur.mikrobiol. epid. i immun. 32 no.4:14-19 Ap '61. (MIRA 14:6)

1. Iz kafedry epidemiologii I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.
(DIPHTHERIA)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

ZAV'YALOV, P.V.; PERFIL'YEVA, Ye.M.

Tumors of the carotid gland. Stomatologiia 40 no.2:91-92 Mr-Ap '61. (MIRA 14:5)

1. Iz otolaringo-stomatologicheskogo otdeleniya (zav. Ye.I.Shelkov) Barnauk'skoy gorodskoy bol'nitsy (glavnyy vrach - zasluzhennyy vrach RSFSR R.I. Vas'kova).
(CAROTID BODY--TUMORS)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

BELIKOVA-ALDAKOVA, V.D., PERFIL'YEVA, Ye.P.

Some problems in organizing preventive diphtheria inoculations in rural areas. Zdrav.Ros.Fed. 2 no.9:21-24 S'58 (MIRA 11:10)

1. Iz kafedry epidemiologii (zav. - prof. I.I. Yelkin) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(DIPHTHERIA)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

TROYANSKIY, Sergey Vasil'yevich, prof.; VASIL'YEV, Sergey Petrovich, dots.; BOGACHEVA, Yevgeniya Nikolayevna; PERFIL'YEVA, Zoya Georgiyevna, inzh.; GUSEL'NIKOV, I.I., dots., otv. red.; SLOVOROSOV, A.Kh., red. izd-va; BOLDYREVA, Z.A., tekhn. red.

[Geology and prospecting of coal deposits and fundamentals of general geology and hydrogeology] Geologiia i razvedka ugol'nykh mestorozhdenii s osnovami obshchei geologii i gidrogeologii. By S.V.Troianskii i dr. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1961. 319 p. (MIRA 14:11)
(Mine surveying) (Coal—Geology)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

KHOROSHEV, I.I., doktor tekhn. nauk, prof., PERFILOVIN, V.S., inzh.

Effect of [illegible]inum, boron and bismuth on the formation of graphitization centers, acceleration of annealing and engineering properties of malleable cast iron. Izv. vys. ucheb. zav.; mashinostr. no.2:146-155 '64. (MIRA 17:5)

1. Rostovskiy institut sel'skokhozyaystvennogo mashinostroyeniya.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

KHOROSHEV, I.I.; PERFISHIN, V.S.

Modifying effect of boric acid and ferrosilicon boral in the production of malleable cast iron castings. Izv. vys. ucheb. zav.; chern. met. 7 no.2:153-156 '64. (MIRA 17:3)

1. Rostovskiy-na-Donu institut sel'skokhozyaystvennogo mashinostroyeniya.

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PERFISHIN,V.S.

Furnace casting on conveyers. Lit. proizv. no.6:26-27 '55.
(Founding) (MLRA 8:8)

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PERFUROW, I.

A progressive auto school. Avt.transp.34 no.5:31 My '56.
(Liepaja--Automobile drivers) (MIRA 9:9)

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PERFUSION, M.I.

/ Effects of tansy on the cardiovascular system. M. I. Rabinovich. *Farmakol. i Toksikol.* 17, No. 1, 33(1954).—Perfusion of tansy blossom ext. (50, 25, and 12.5 p.p.m. in Ringer soln.) through isolated frog heart slows cardiac rhythm and increases amplitude by 2-8 mm. Cardiac depression appears at 100 p.p.m. In cats under ether or urethan narcosis, or with severed spinal cord, 1-5 ml. of 2% ext. (intravenous) raised blood pressure by 4-37 mm. and cardiac amplitude by 14-70 mm. and depressed rhythm. Toxicity is low; cats tolerated doses up to 400 ml. / Julian F. Smith

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khim., No 2, 1959, 4715.

Author : Luces, R. and Pergal, M.
Inst :
Title : Homologs of Pyridine. II. Synthesis of Some $\alpha$, $\alpha'$-substituted Pyridines and Their Reactions.

Orig Pub: Chem Listy, 52, No 1, 68-76 (1958) (in Czech)

Abstract: 2,6-$R_2C_5H_3N$ (I) (where Ra = $C_2H_5$, Rb = n-$C_3H_7$, Rc = isc-C H , Rd = n-$C_3H_7CHCH_3$, Re = = $CH_3$) have been synthesized by the reduction of the corresponding glycols, 2,6-$(R'_2(OH)C)_2C_5H_3N$ (IIa, b) (R'a = $CH_3$, R'b = $C_2H_5$), or of the diketo derivatives, 2,6-$(R'CO)_2C_5H_3N$ (IIIa, b). The II are prepared a Grignard synthesis from 2,6-$(R'OOC)_2$ $C_5H_3N$ (IVa, b); the ketones III are obtained from

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khim., No 2, 1959, 4715.

synthesized, yield 81.8%, bp 185°/16mm, mp 43°. IIa is prepared by heating 35 gms IVa for 30 min with $CH_3MgBr$ (from 36 gms Mg) in $C_6H_6$; yield 70%, mp 91°. 9.5 gms IIa are refluxed for 11 hrs with 100 gms HI (acid, d = 1.7) and 10 gms of red P, the HI is distilled off under vacuum, and the residue is treated with $NaHSO_3$ followed by alkalinization; steam distillation gives Ic, yield 84.3%, bp 75°/15 mm, 90°/25mm, $n^{25}D$ 1.4768, $n^{40}D$ 1.4700, $d^{20}_4$ 0.8788; picrate, mp 114°. $C_2H_5MgBr$ and IVb on refluxing for 30 min in ether give a mixture from which 0.23 gms IIb were obtained (bp 115°/2mm) after reduction with HI acid.

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Abs Jour: Ref Zhur-Khim., No 2, 1959, 4715.

IIb is also obtained in small yields by the reaction of $C_2H_5MgBr$ with IIIb. 14.75 gms n-$C_3H_7MgBr$ are refluxed for 45 min with 8.15 gms IIIa, the mixture is decomposed by heating with a concentrated solution of $K_2CO_3$, and the reaction products are reduced with HI + P; 0.46 gms Id are obtained, bp 111°/12mm, picrate mp 166-167°. When III (R' = $NH_2$) is heated for 2 hrs at 125-130° with $POCl_3$ and the excess $POCl_3$ is distilled off under vacuum, V is obtained, yield 89.5%, mp 126°. V on refluxing for 30 min with $CH_3MgI$ in ether gives 11% IIIb. A mixture of IVb, xylene, $CH_3COOC_2H_5$ and $C_2H_5ONa$ (from 8 gms Na) is refluxed 19 hrs, followed by heating to 150° for 30 min with dil



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Abs Jour: Ref Zhur-Khim., No 2, 1959, 4715.

HDl (2:1); the yield of IIIb is 85.5%, mp 79°, bis-semicarbazone derivative mp 250° (decomp), dioxime derivative mp 233.5°, dihydrazone derivative mp 181°. When V and $C_2H_5MgBr$ are refluxed in ether for 12 hrs at 20°, IIIb is obtained, yield 51%, bp 110°/0.8mm, mp 62°. When IIIa is heated with hydrazine in the presence of solid KOH to 140-190°, the solution is acidified with dilute $H_2SO_4$, $CuSO_4$ is added, the mixture is steam distilled, the residue is made alkaline and steam distilled for a second time, Ia is obtained, bp 171°/744mm, picrate mp 116-117°. A similar procedure is used in synthesizing Ib, yield 67.3%, bp 206-207°, picrate mp 83.5-84°. 18.8 gms Ie and

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khim., No 2, 1959, 4715.

37.5 gms $CH_3I$ are allowed to stand for 4 days; the yield of iodomethylate (VIII) is 99%, mp 237-238°. The product, standing time, yield of iodomethylate in %, and mp in °C are listed in that order: iodomethylate of Ia (IX), 28 days, 86.9, 142; iodomethylate of Ic, 1 yr, 45.1, 118.5. VIII is made alkaline with KOH and steam distilled in a silver flask, the distillate is acidified and extracted with ether; the ether phase gives VII, 2,4-dinitrophenylhydrazone mp 174°. When 6.7 gms IX are heated for 38 hrs with aqueous KOH in an autoclave to 200°, followed by steam distillation and acidification of the residue, 2.3 gms VI are

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LUKEŠH, R. [Lukes, R.] (deceased); PERGAL, M.

Synthesis of N-substituted imides of (±)-malic acid and maleic acid and their reduction by means of lithium-aluminum hydride. Coll Cz Chem 27 no.6:1387-1392 Je '62.

1. Kafedra organicheskoy khimii, Khimiko-tekhnologicheskiy institut, Praga.

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PERGAL, Miroslav

Concentration of vitamin B by means of the indigenous active carbon. Glas Hem dr 25/26 no.5/7:401-403 '60/'61.

1. "Galenika," Research Institute, Beograd-Zemun.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

PERGAL, M.

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: [not given]

Affiliation: Chemical Institute of the Medical Faculty, Palacky University (Chemisches Institut der medizinischen Fakultaet, Palacky-Universitaet), Olomouc and Institute of Organic Chemistry, Technical College of Chemistry (Institut fuer organische Chemie, Technische Hochschule fuer Chemie), Prague

Source: Prague, Collection of Czechoslovak Chemical Communications, Vol 26, No 11, November 1961, pp 2749-2753

Data: "Polarography of the Alkyl and Aryl Amides of Maleic Acid."

Authors:

NEMECKOVA, A
MATUROVA, M
PERGAL, M
SANTAVY, F

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

**Pyridine homologs. III. Synthesis and reactions of some α,α'-dialkylpyridines.** Rudolf Lukeš and Miroslav Pergal (Vysoká škola chem. technol., Prague). *Chem. listy* 57, 68–78 (1963); cf. *C.A.* 54, 2163c.—2,6-Dialkylpyridines and esters of 2,6-pyridinedicarboxylic acid (I) were transformed by means of Grignard reactions to the corresponding carbinols whose reduction yielded *2,6-diethylpyridine* (II), *2,6-dipropylpyridine* (III), *2,6-diisopropylpyridine* (IV), *2,6-di(2-pentyl)pyridine* (V) and *2,6-di(3-pentyl)pyridine* (Va). *Methiodides* of *2,6-lutidine* (VI) and of II yielded *α-MeC₅H₃NCH₂OH* (VII) and *2,2'-HOC₅H₃NMeEt* (VIII) on treatment with KOH. The increasing vol. of the alkyl groups in α-positions resulted in decreasing rate of formation of methiodides and decreasing yields. For Me, Et, and iso-Pr in both α-positions, the respective yields were 99, 86.9, and 45% after the respective reaction time 4, 28, and 365 days. Triturating 40 g. dried tetra-K deriv. of picoline with 130 g. $PCl_5$, heating the liquefied material 30 min. on the steam-bath, distg. the $POCl_3$ *in vacuo*, adding portionwise 200 ml. MeOH, refluxing the mixt. 1 hr., distg. the excess MeOH, alkalizing the mixt. with $K_2CO_3$, and filtering off the crystals gave 73% *di-Me ester* (VIIIa) of I, m. 121°. Similarly was prepd. *di-Et ester* (VIIIb) of I from 40 g. di-K salt of I, 150 g. $PCl_5$, and 200 ml. EtOH in 81.3% yield, m. 43°, $b_{20}$ 185°. Treating 26 g. Mg with MeBr in 500 ml. $Et_2O$, replacing the $Et_2O$ with $C_6H_6$, adding 35 g. VIIIa in 400 ml. warm (70°) $C_6H_6$, refluxing the mixt. after the reaction an addnl. 0.5 hr., steam-distg. the $C_6H_6$, filtering the residue, evapg. the filtrate to dryness *in vacuo*, extg. both the residue and the filtered-off Mg salts with $Me_2CO$, and evapg. the solvent gave 70% *2,6-bis(2-hydroxy-2-propyl)pyridine* (IX), m. 91° (MeOH). Refluxing 9.5 g. IX with 10 g. red P and 100 g. HI (d. 1.7) 11 hrs., filtering off the P, washing with 10 ml. HI, evapg. the filtrate, dilg. the residual oil with 50 ml. $H_2O$, decolorizing the soln. with $NaHSO_3$, alkalizing with dil. KOH, steam-distg. the mixt. alkalizing the dist. with KOH, and extg. with ether yielded 84.3% IV, $b_{20}$ 90°, $b_{15}$ 75°, $d_{20}$ 0.8788, $n_D^{20}$ 1.4768; *picrate*, m. 114° (EtOH). To the Grignard reagent prepd. from 10.75 g. EtBr was added 5 g. VIIIb in 45 ml. $Et_2O$, the mixt. refluxed 30 min., allowed to stand overnight, decompd. with 15 g. $K_2CO_3$ in 40 ml. $H_2O$, the stirred mixt. heated 20 min. on the steam-bath, filtered, and extd. with $Et_2O$ to give 4.6 g. oil which was immediately treated with 50 ml. HI and 10 g. P to give 0.23 g. *2,6-bis(3-hydroxy-3-pentyl)pyridine*, $b_3$ 115°. The same product was obtained in 0.15 g. yield from EtMgBr and 1 g. *2,6-dipropionylpyridine* (X) in 20 ml. $Et_2O$ after decompg. the mixt. with 3.5 g. $NH_4Cl$ in 50 ml. $H_2O$ at −5°. To the Grignard reagent prepd. from 14.75 g. PrBr was added 8.15 g. *2,6-diacetylpyridine* (XI) in 70 ml. $Et_2O$, the mixt. heated 45 min., allowed to stand overnight, decompd. with 50 ml. $H_2O$ and 60 ml. concd. $K_2CO_3$ soln., finally by heating 30 min. on the steam-bath, the Mg salts filtered off, the filtrate extd. with $Et_2O$, and the soln. evapd. to give 7.8 g. red oil. This (6.3 g.) refluxed 16.5 hrs. with 120 g. HI and 10 g. P gave 0.37 g. Va, $b_{20}$ 111°; *picrate*, m. 106–7° (EtOH). Heating 13.5 g. diamide (XIa) of I with 135 g. $P_2O_5$ (in portions of 0.25 g. amide) in test-tubes with a direct flame at 11 mm., crushing the test-tubes, and extg. the material by refluxing 30 min. with $C_6H_6$ gave 21.2% *2,6-dicyanopyridine* (XII), m. 128° (EtOH) (sublimed at 3 mm.). The same product was obtained in a 89.5% yield by heating 1 g. XIa with 19.25 g. $POCl_3$ at 125–30°, distg. the $POCl_3$, alkalizing the residue with satd. $Na_2CO_3$ soln., and extg. with $CHCl_3$. To the Grignard reagent prepd. from 23 g. MeI and 5 g. Mg,

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LUKEŠ, RUDOLF AND PERGÁL, MIROSLAV

was added 2.6 g. XII in 300 ml. $Et_2O$, the soln. refluxed 30 min., decompd. with $NH_4Cl$ and ice, and extd. with $Et_2O$ to give 11% XI, m. 79° (sublimed at 110–30°/11 mm.). Adding at once 22.5 g. VIIIb dissolved in 50 ml. xylene and 32.5 g. AcOEt to NaOEt prepd. from 8 g. Na, dilg. the mixt. with 100 ml. xylene, refluxing 19 hrs., adding 140 ml. HCl and 75 ml. $H_2O$, heating the mixt. 30 min. at 150°, sepg. the xylene layer, evapg. *in vacuo*, adding the residual oil to the aq. layer, refluxing the mixt. 4 hrs., neutralizing with $NaHCO_3$, and extg. with $Et_2O$ gave 85.5% XI; *disemicarbazone*, m. 250° (decompn.). *dioxime*, decomp. 233.5° (1:1 EtOH-$H_2O$); *dihydrazone*, m. 181° (EtOH). To the reagent prepd. from 9 g. Mg and 40 g. EtBr was added 4.8 g. XII in 350 ml. $Et_2O$, the mixt. decompd. with ice and $NH_4Cl$, filtered, and extd. with $Et_2O$ to give 51% X, $b_{0.5}$ 110°, m. 62°. Heating 5 g. XI with 10 g. $N_2H_4.H_2O$ at 140°, adding after cooling 129 g. powdered KOH, heating the mixt. 1–1.5 hrs. at 140–50°, adding after cooling 100 ml. $H_2O$, treating the soln. dropwise with 78 ml. $H_2O$ and 88 ml. $H_2SO_4$, adding 84.4 g. $CuSO_4$ in 100 ml. $H_2O$ and 32 ml. $H_2SO_4$, allowing the mixt. to stand 4 hrs., steam-distg., alkalizing the residue with KOH, steam-distg. again, alkalizing the distillate with KOH, extg. with $Et_2O$, drying the extn. with KOH, and distg. in a column gave II (yield not given), $b_{744}$ 171°, *picrate*, m. 116–17° ($H_2O$). Similar treatment of 4.7 g. X gave after filtration of the petr. ether ext. of the crude product through $Al_2O_3$ 67.3% III, b. 206–7°; *picrate*, m. 83.5–84°. Treating 18.8 g. VI with 37.5 g. MeI, filtering off the crystals after 4 days, dissolving them in $H_2O$, steam-distg. the soln., and evapg. the residue to dryness *in vacuo* yielded 99% *methiodide* (XIII) of VI, m. 237–8°. Allowing 7.3 g. II to stand with 15.5 g. MeI in the dark, filtering off the deposited crystals after 14 days, adding to the filtrate 5 ml. MeI, and repeating the procedure twice more gave 86.9% *methiodide* (XIV) of II; m. 142°. Similar treatment of 2 g. IV with MeI gave after 1 year 45.1 g. *methiodide* of IV, m. 118.5° ($Me_2CO$). Distg. 12.45 g. XIII with 5.6 g. KOH in 15 ml. $H_2O$ during 2 hrs. up to 190–200° in an Ag flask, adding to the cold residue 15 ml. $H_2O$, heating the mixt. on an oil-bath to 170–80° during 3 hrs., refluxing the mixt. with 75 ml. $H_2O$ 10 min., filtering the soln., acidifying with HCl, and extg. with $Et_2O$ gave a small residue having phenolic odor. The distillate contained in addn. to $MeNH_2$ 0.2 g. *3-methyl-1-cyclohexen-3-one*. Heating 15 g. XIII with 11.85 g. KOH and 100 ml. $H_2O$ in a beaker in an iron autoclave 38 hrs. at 200°, steam-distg. the mixt., acidifying with HCl, and extg. with $Et_2O$ yielded VII. Similar treatment of 6.7 g. XIV with 5.3 g. KOH in 47 ml. $H_2O$ 34 hrs. at 200–10° gave 2.3 g. VIII, m. 67°, $b_5$ 115°.

M. Hudlický

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PERGAMENSHCHIK, M. (Tula)

Bill to the machine builders. Sov.shakht. 13 no.1:20-21 Ja '64.
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L 28387-66 EPF(n)-2/EWA(h)/EWT(m)/EWC(f)/EWG(m)/EWP(t)/ETI WW/JD/JG
ACC NR: AP6001794 (A) SOURCE CODE: UR/0089/65/019/006/0524/0529

AUTHOR: Dubrovskiy, V. B.; Krasnoyarov, N. V.; Kulakovskiy, M. Ya.; Pergamenshchik, B. K.; Pinkhasik, M. S.; Savitskiy, V. I.

ORG: None

TITLE: Use of concrete for nuclear reactor shielding at high temperatures

SOURCE: Atomnaya energiya, v. 19, no. 6, 1965, 524-529

TOPIC TAGS: nuclear reactor shield, nuclear reactor material, chromite, concrete

ABSTRACT: A theoretical study is presented on the possible utilization of heat-resistant chromite and ordinary refractory concretes for thermal shielding of nuclear reactors. Ordinary concrete was chosen for investigations because this material is widely used in industries while chromite concrete was selected on account of its high neutron absorbing and moderating properties and for its efficient gamma-shielding qualities. The chemical compositions and physical properties of these two materials were summarized in two tables. The heat release produced in concrete by neutron fluxes was calculated under the condition that the gamma flux was equal to zero. It was assumed, that neutrons were emitted from a Pu-239 plate of a 5-cm thickness and infinite length. Data taken from

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ACC NR: AP6001794

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various sources were used for calculating neutron fluxes of different levels up to $10^{13}$ neutrons per sq cm sec. The distributions of neutron fluxes in ordinary and chromite concrete shieldings were graphically illustrated including total and fast neutron fluxes. Similar curves were plotted for gamma radiations per one neutron. The heat distribution inside chromite concrete shielding per one neutron was also represented. Temperatures were calculated for various neutron fluxes, concrete thicknesses and heat transfer coefficients. The results were plotted in four sets of curves. Mechanical stresses caused by differences in temperature were investigated in connection with the reinforcement of concrete in outer shielding areas. The calculations were made for cylindrical shielding made of chromite concrete (trade mark 400) with embedded metal rings (trade mark 2 x 13). The results of calculations for various thicknesses were tabulated. It was concluded that heat-resistant concrete could be used for neutron fluxes up to $10^{13}$ neutrons per sq cm sec, temperatures up to 1100 C and temperature drops up to 900 C. Orig. art. has: 3 tables and 7 figures.

SUB CODE:18, 11/ SUBM DATE: 21Jan65 / ORIG REF: 014 / OTH REF: 007

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L 15938-66 EWT(m)/ETC(f)/EPF(n)-2/EWG(m) WW
ACC NR: AP6005940 (A) SOURCE CODE: UR/0097/66/000/002/0011/0013

AUTHOR: Vorob'yev, A. N. (Engineer); Dubrovskiy, V. B. (Candidate of technical sciences); Ibragimov, Sh. Sh. (Doctor of technical scienc ; Ladygin, A. Ya. (Engineer); Pergamenshchik, B. K. (Engineer)

ORG: none

TITLE: Radiation resistance of the portland cement-based chromite concrete

SOURCE: Beton i zhelezobeton, no. 2, 1966, 11-13

TOPIC TAGS: concrete, construction material, nuclear reactor shield, irradiation resistance, radiation damage

ABSTRACT: The effect of neutron irradiation has been studied on samples of chromite concrete with portland cement binder to supply data on radiation resistance of this material. The material was recognized as a potential substitute for expensive and scarce materials, such as steel, graphite, boron graphite, etc., which are presently used for construction of a heat-shield around nuclear reactors. The briquetted samples were made from a mixture of chromite, portland cement, and phosphoric acid and were irradiated with $2.37 \times 10^{21}/cm^2$ neutron flux in a BP-5



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reactor for a period of time at temperature fluctuating in the 200—550C range. The irradiated samples maintained the original form and dimensions. Compressive strength of irradiated samples decreased to 60% of the strength of non-irradiated samples kept at room temperature and up to 39% of the strength of non-irradiated samples but exposed to the same temperature fluctuations as irradiated samples. The effect of radiation accounted for a 26% decrease in compressive strength, which indicated that the use of this material in construction of the heat shield for nuclear reactors may be possible. Orig. art. has: 2 figures and 2 tables.

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SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 010/ ATD PRESS: 4202

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

EWT(1)/EWT(m) GO/GM

L 10332-67

ACC NR: AP6029728 SOURCE CODE: UR/0089/66/021/002/0108/0112

AUTHOR: Dubrovskiy, V. B.; Ibragimov, Sh. Ch.; Ladygin, A. Ya.; Pergamenshchik, B. K.

ORG: none

TITLE: Effect of neutron irradiation on certain properties of refractory concretes

SOURCE: Atomnaya energiya, v. 21, no. 2, 1966, 108-112

TOPIC TAGS: concrete, refractory product, neutron irradiation, reactor shielding, reactor neutron flux, irradiation damage

ABSTRACT: This is a continuation of earlier research on the use of refractory concrete in reactor construction (Atomnaya energiya v. 19, 524, 1965), where it was concluded that lack of data on the radiation endurance of concrete is the only obstacle to its use for shielding against intense radiation fluxes. The present article presents neutron-irradiation data on chromite refractory concrete made with portland cement and liquid glass. The concrete, in the form of briquettes 15 mm high and 15 mm in diameter, was tested in an integral neutron flux (2--2.4) x $10^{21}$ neut/cm$^2$ at an irradiation temperature up to 550C. The effect of the irradiation damage was examined visually and also by measuring the change of weight and dimensions, the change in the coefficient of thermal conductivity, and the change in the strength and elastic properties. It is concluded that the concrete samples retain sufficiently high strength and elas-

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ticity, nor do noticeable changes take place in the thermal conductivity and in the coefficient of thermal expansion. This makes the material suitable for thermal shielding of nuclear reactors. Work on the influence of irradiation on the shrinkage and setting of the concrete and other strength characteristics are being presently continued. The authors thank A. N. Komarovskiy for suggesting the research, and A. N. Vorob'yev, V. F. Gulyayeva, M. Ya. Kulakovskiy, P. G. Pinchuk, and V. I. Savitskiy for help with the work. Orig. art. has: 3 figures and 3 tables

SUB CODE: 18/ SUBM DATE: 08Dec65/ ORIG REF: 004/ OTH REF: 003

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030003-8

VNUKOV, Sergey Alekseyevich, inzh.; PERGAMENSHCHIKOV, B., red.; NEMYTOV, V., tekhn. red.

[Mechanization and automation of industrial production; practice of enterprises of the Orel Economic Region] Mekhanizatsiia i avtomatizatsiia proizvodstva; iz opyta predpriiatii Orlovskogo ekonomicheskogo administrativnogo raiona. Orel, Orlovskoe knizhnoe izd-vo, 1960. 78 p. (MIRA 17:3)

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